

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, DC 20554**

In the Matter of)	
)	
Reallocation of the 216-220 MHz)	WT Docket No. 02-08
1390-1395 MHz, 1427-1429 MHz,)	RM-9267
1429-1432 MHz, 1432-1435 MHz)	RM-9692
1670-1675 MHz, and 2385-2390 MHz)	RM-9797
Government Transfer Bands)	RM-9854
)	RM-9882

To: The Commission

**COMMENTS
OF THE
AMERICAN PETROLEUM INSTITUTE**

The American Petroleum Institute (“API”), by its attorneys and pursuant to Section 1.415 of the Rules and Regulations of the Federal Communications Commission (“FCC” or “Commission”), respectfully submits the following comments in response to the Commission’s *Notice of Proposed Rulemaking* (“NPRM”)¹ in the above-captioned proceeding. The NPRM addresses the proposed service rules for licensing and utilizing the 27 megahertz of spectrum reallocated from Government to non-Government use pursuant to provisions of the Omnibus Budget Reconciliation Act of 1993 (“OBRA-93”) and the Balanced Budget Act of 1997 (“BBA-97”).²

¹ 67 Fed. Reg. 7113 (2002).

² Reallocation of the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands, *Notice of Proposed Rulemaking*, WT Docket No. 02-08, FCC 02-15 (rel. Feb. 6, 2002) (hereinafter NPRM).

I. PRELIMINARY STATEMENT

1. API is a national trade association representing approximately 400 companies involved in all phases of the petroleum and natural gas industries, including the exploration, production, refining, marketing and transportation of petroleum, petroleum products and natural gas. The API Telecommunications Committee is one of the standing committees of the organization's Information Systems Committee. The Telecommunications Committee evaluates and develops responses to state and federal proposals affecting telecommunications facilities used in the oil and gas industries.

2. API's Telecommunications Committee is supported and sustained by licensees that are authorized by the Commission to operate, among other telecommunications systems, facilities in the Private Land Mobile Radio Services ("PLMRS"). API's members utilize PLMRS systems, for example, to support the search for and production of oil and natural gas, to ensure the safe pipeline transmission of natural gas, crude oil and refined petroleum products, to process and refine these energy sources and to facilitate their ultimate delivery to industrial, commercial and residential customers.

3. Many of these same licensees also utilize facilities authorized in the Private Operational-Fixed Microwave Services ("POFS"). These systems serve a variety of vital telecommunications functions, including communications with remote oil and gas exploration and production sites for voice and data applications, communications with refineries, the extension of circuits to remote pipeline pump and compressor stations, and supervisory control and data acquisition systems ("SCADA") that remotely monitor and control wells and pipelines. Multiple Address System ("MAS") assignments are used extensively in the production of oil and gas from both on-shore and offshore wells, as well as in the remote operation of pipeline

facilities. The oil and gas industries were among the pioneers in the development of private microwave, utilizing their systems to monitor and operate petroleum and natural gas pipelines.

4. The private radio systems operated by API members are absolutely essential to protecting the safety of life, health and property, both in connection with members' day-to-day operations and during responses to emergency incidents. These systems are integral to the provision of our nation's energy resources. Due to the critical importance of PLMRS and POFS systems to the operations of its members, API has been an active participant in all of the Commission's major rule making proceedings that have addressed the use of spectrum in the private radio services.

II. COMMENTS

5. In the Report and Order released in ET Docket No. 00-221 (the "Reallocation Order"), the Commission adopted a combination of its three proposed band plan options for the following four frequency bands: 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, and 1432-1435 MHz (collectively, the "1.4 GHz" spectrum).³ This band plan provides for 8 megahertz of spectrum for fixed and mobile services (i.e., the unpaired 1390-1392 MHz segment and the paired segments 1392-1395 MHz and 1432-1435 MHz), as well as allocations for primary telemetry (1429.5-1432 MHz) and secondary telemetry (1427-1429.5 MHz) applications. In the Reallocation Order, the Commission did not adopt service rules to govern operations in the 1.4 GHz band; instead, the provisions for licensing, technical and operating rules, competitive

³ Reallocation of the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands, *Report and Order and Memorandum Opinion and Order*, ET Docket No. 00-221, FCC 01-382 (rel. Jan. 2, 2002) (hereinafter Reallocation Order).

bidding, and interference standards governing this spectrum are the subject of the instant proceeding. In the Comments set forth below, API takes this opportunity to raise several issues that, if not addressed, could severely limit access by oil and gas industry companies to this reallocated spectrum.

A. Oil and Gas Industry Companies Should Be Eligible for “Telemetry” Operations in the 1.4 GHz Band

6. In ET Docket No. 00-221, the term “utility” telemetry was used in the Notice of Proposed Rulemaking regarding telemetering applications in the 1.4 GHz band. In its Comments submitted in that proceeding, API requested that the Commission clarify what entities would be included in eligibility for this service if that term were adopted as a restriction on telemetry operations in this band. In the Reallocation Order, the Commission designated the 1429.5-1432 MHz segment for Telemetry operations on a primary basis, and the 1427-1429.5 MHz band segment for Telemetry operations on a secondary basis to the primary Wireless Medical Telemetry Service (“WMTS”); the term “utility telemetry” was not employed in the Reallocation Order. Citing concern regarding harmful interference from telemetry operations to devices operating in the WMTS, the American Hospital Association (“AHA”) has proposed a limitation on telemetry operations in this band that would restrict operations to “utility” telemetry and fixed operations, and the Commission has requested comment on this proposal.⁴ API again requests clarification as to which entities would be eligible if such a restriction is adopted.

7. As API has stated in previous comments regarding this spectrum, petroleum and natural gas companies utilize point-to-multipoint systems to monitor and control a multitude of measurements and tolerance levels at wellheads, compressor stations and valves. Existing MAS

⁴ See NPRM ¶ 56.

allocations used for these types of SCADA applications are exhausted in some areas. The 1.4 GHz spectrum could offer some relief because it may be possible for petroleum and natural gas companies to employ 1.4 GHz MAS-type systems in remote, rural or offshore production fields in a manner that would not interfere with other telemetry applications in this band. If a “utility telemetry” restriction is adopted, API strongly urges the Commission to adopt eligibility rules for telemetry allocations in the 1.4 GHz band that are broad enough to include petroleum and natural gas SCADA applications.

B. Operations in the 1390-1392 MHz Band Should Be Licensed on a Site-by-Site Basis

8. In the *NPRM*, the Commission proposes to utilize geographic area licensing in the bands where it is establishing new services, which includes the band segment 1390-1392 MHz.⁵ API opposes geographic area licensing for this spectrum and instead advocates a site-by-site licensing scheme. In an effort to relieve the existing congestion in the bands available for private, mobile systems, the Land Mobile Communications Council (“LMCC”) had submitted to the Commission two Petitions for Rule Making seeking additional spectrum for private systems.⁶ In the Reallocation Order, the Commission stated that the 1390-1392 MHz spectrum, along with the six megahertz of paired spectrum in the 1392-1395 MHz and 1432-1435 MHz band, “provides sufficient spectrum to relieve much of the crowding in the existing land mobile bands.”⁷ API respectfully disagrees. First, the 1432-1435 MHz segment of the paired spectrum must be licensed by auction pursuant to the Balanced Budget Act of 1997, which severely limits the availability of this spectrum for privately-licensed systems. Due to the requirement that this

⁵ See *NPRM* ¶ 29.

⁶ LMCC Petition for Rule Making, RM-9267 (filed Apr. 22, 1998) and LMCC, Petition for Rule Making, RM-9267 (filed June 10, 1999).

⁷ Reallocation Order ¶ 51.

spectrum be licensed by auction, geographic area licensing is more appropriate for these band segments; however, the practical result will be “shutting out” oil and gas companies from eligibility for licensing systems in the spectrum (unless alternate access can be gained through a Band Manager, as further discussed below).

9. Second, were the Commission to adopt geographic area licensing in the 1390-1392 MHz segment as proposed in the NPRM, this spectrum will not be appropriate to meet the coverage needs of many private radio users, especially oil and natural gas companies. If this spectrum is intended to relieve congestion in the existing private land mobile bands, it is spectrally inefficient to grant wide area licenses to private spectrum users that may only need coverage in sparsely populated areas where other conventional telecommunications services are not available. In that regard, it does not make sense for one licensee to control frequencies that could, instead, be utilized by several different parties throughout a particular geographic area. Further, if wide-area geographic licensing is adopted for this spectrum, it may force private spectrum users to rely on partitioning and/or disaggregation in order to gain access to spectrum, resulting in increased administrative and operating costs, as well as a potential decrease in control over mission-critical operations. In API’s view, the use of market-based geographic area licensing is appropriate only for licensees that intend to provide service to the public for profit; if this spectrum allocation is intended to relieve congestion in the private land mobile band, site-by-site licensing is the appropriate mechanism to use.

10. As stated above, API supports licensing the 1390-1392 MHz band on a site-by-site basis. In the event, however, that the Commission does establish geographic area licensing

for this band, API opposes adoption of the proposal to license this band on a nationwide basis.⁸

For the reasons noted above, smaller geographic area licenses would come closer to meeting the particularized needs of private radio users.

C. API Supports Band Manager Eligibility for Licensing the Paired Spectrum at 1392-1395 MHz and 1432-1435 MHz

11. As discussed above, the 1432-1435 MHz band must be licensed by auction pursuant to congressional mandate. With that requirement in mind, API supports Band Manager eligibility for licensing the paired segments at 1392-1395 MHz and 1432-1435 MHz, and advocates that auctions be limited to Band Manager licensees. At this time, API supports the application in the 1.4 GHz band of the rules established for Band Managers under Part 27 of the FCC's rules. API notes, however, that these rules have not had the opportunity to be fully tested in practice and that adjustments may therefore be in order at a later date.

12. While API supports geographic area licensing for this spectrum, it does not believe this spectrum should be licensed on a nationwide basis as a single six megahertz block. Licensing the spectrum in this manner would effectively eliminate competition in the market for Band Manager spectrum, thereby driving-up costs and limiting technological innovation, which could further restrict access to this spectrum by oil and gas industry companies. If this spectrum is intended to relieve some of the congestion in the land mobile bands, the Commission must institute a licensing scheme that will facilitate access by those that operate private radio systems.

III. CONCLUSION

13. As stated in its Comments prior to the Reallocation Order, API wishes to emphasize the substantial and growing demand for private radio spectrum, a need that has been

⁸ See NPRM ¶ 33.

acknowledged by the Commission. The agency has stated, in fact, that the 8 megahertz of spectrum allocated for mobile and fixed use is intended to relieve congestion in the existing bands available for the operation of private systems. In that regard, it is in the public interest to adopt service rules that will promote, rather than eliminate, the possibility that oil and gas industry companies have access to spectrum in the 1.4 GHz band so as to foster the operation of the private internal communications systems that support the safe and efficient production of our nation's energy supply.

WHEREFORE, THE PREMISES CONSIDERED, the American Petroleum Institute respectfully submits the foregoing Comments and urges the Federal Communications Commission to act in a manner consistent with the views expressed herein.

Respectfully submitted,

**THE AMERICAN PETROLEUM
INSTITUTE**

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